

# Thomas H Macrae

## List of Publications by Year in descending order

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79  
papers

3,939  
citations

117625

34  
h-index

123424

61  
g-index

80  
all docs

80  
docs citations

80  
times ranked

3117  
citing authors

#	ARTICLE	IF	CITATIONS
1	Insect Heat Shock Proteins During Stress and Diapause. Annual Review of Entomology, 2015, 60, 59-75.	11.8	444
2	Transcription factors and their genes in higher plants. Functional domains, evolution and regulation. FEBS Journal, 1999, 262, 247-257.	0.2	310
3	The small heat shock proteins and their role in human disease. FEBS Journal, 2005, 272, 2613-2627.	4.7	290
4	Tubulin Post-Translational Modifications. Enzymes and Their Mechanisms of Action. FEBS Journal, 1997, 244, 265-278.	0.2	267
5	Gene expression, metabolic regulation and stress tolerance during diapause. Cellular and Molecular Life Sciences, 2010, 67, 2405-2424.	5.4	199
6	Purification, Structure and In vitro Molecular-Chaperone Activity of Artemia P26, a Small Heat-Shock $\alpha$ -Crystallin Protein. FEBS Journal, 1997, 243, 225-232.	0.2	106
7	Molecular chaperones, stress resistance and development in Artemia franciscana. Seminars in Cell and Developmental Biology, 2003, 14, 251-258.	5.0	103
8	A small stress protein acts synergistically with trehalose to confer desiccation tolerance on mammalian cells. Cryobiology, 2005, 51, 15-28.	0.7	98
9	Flagellar Morphogenesis: Protein Targeting and Assembly in the Paraflagellar Rod of Trypanosomes. Molecular and Cellular Biology, 1999, 19, 8191-8200.	2.3	95
10	Molecular Characterization of a Small Heat Shock $\alpha$ -Crystallin Protein in Encysted Artemia Embryos. Journal of Biological Chemistry, 1997, 272, 19051-19058.	3.4	88
11	Nuclear-Cytoplasmic Translocations of Protein p26 during Aerobic-Anoxic Transitions in Embryos of Artemia franciscana. Experimental Cell Research, 1995, 219, 1-7.	2.6	78
12	Stress tolerance during diapause and quiescence of the brine shrimp, Artemia. Cell Stress and Chaperones, 2016, 21, 9-18.	2.9	78
13	Functional characterization of artemin, a ferritin homolog synthesized in Artemia embryos during encystment and diapause. FEBS Journal, 2007, 274, 1093-1101.	4.7	76
14	Stress response for disease control in aquaculture. Reviews in Aquaculture, 2011, 3, 120-137.	9.0	69
15	Towards an understanding of microtubule function and cell organization: an overview. Biochemistry and Cell Biology, 1992, 70, 835-841.	2.0	64
16	Exposure of gnotobiotic Artemia franciscana larvae to abiotic stress promotes heat shock protein 70 synthesis and enhances resistance to pathogenic Vibrio campbellii. Cell Stress and Chaperones, 2008, 13, 59-66.	2.9	62
17	Maturation of steroid receptors: an example of functional cooperation among molecular chaperones and their associated proteins. Cell Stress and Chaperones, 2000, 5, 76.	2.9	62
18	Diapause termination and development of encysted Artemia embryos: roles for nitric oxide and hydrogen peroxide. Journal of Experimental Biology, 2010, 213, 1464-1470.	1.7	61

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19	Molecular characterization of artemin and ferritin from <i>Artemia franciscana</i> . FEBS Journal, 2002, 270, 137-145.	0.2	59
20	ArHsp21, a developmentally regulated small heat-shock protein synthesized in diapausing embryos of <i>Artemia franciscana</i> . Biochemical Journal, 2008, 411, 605-611.	3.7	57
21	ArHsp22, a developmentally regulated small heat shock protein produced in diapause-destined <i>Artemia</i> embryos, is stress inducible in adults. FEBS Journal, 2008, 275, 3556-3566.	4.7	54
22	Priming the prophenoloxidase system of <i>Artemia franciscana</i> by heat shock proteins protects against <i>Vibrio campbellii</i> challenge. Fish and Shellfish Immunology, 2011, 31, 134-141.	3.6	54
23	Oligomerization, Chaperone Activity, and Nuclear Localization of p26, a Small Heat Shock Protein from <i>Artemia franciscana</i> . Journal of Biological Chemistry, 2004, 279, 39999-40006.	3.4	53
24	Functional analysis of a small heat shock $\beta$ -crystallin protein from <i>Artemia franciscana</i> . FEBS Journal, 2002, 269, 933-942.	0.2	50
25	The Small Heat Shock Protein p26 Aids Development of Encysting <i>Artemia</i> Embryos, Prevents Spontaneous Diapause Termination and Protects against Stress. PLoS ONE, 2012, 7, e43723.	2.5	49
26	Group 1 LEA proteins contribute to the desiccation and freeze tolerance of <i>Artemia franciscana</i> embryos during diapause. Cell Stress and Chaperones, 2014, 19, 939-948.	2.9	45
27	Evidence for multiple group 1 late embryogenesis abundant proteins in encysted embryos of <i>Artemia</i> and their organelles. Journal of Biochemistry, 2010, 148, 581-592.	1.7	43
28	Inhibition of apoptosis by p26: implications for small heat shock protein function during <i>Artemia</i> development. Cell Stress and Chaperones, 2006, 11, 71.	2.9	41
29	A small heat shock $\beta$ -crystallin protein from encysted <i>Artemia</i> embryos suppresses tubulin denaturation. Cell Stress and Chaperones, 2003, 8, 183.	2.9	40
30	Gene expression in diapause-destined embryos of the crustacean, <i>Artemia franciscana</i> . Mechanisms of Development, 2007, 124, 856-867.	1.7	39
31	Reversible arrest of <i>Artemia</i> development by cadmium. Canadian Journal of Zoology, 1986, 64, 1633-1641.	1.0	36
32	Cadmium and zinc reversibly arrest development of <i>Artemia</i> larvae. Bulletin of Environmental Contamination and Toxicology, 1986, 37, 289-296.	2.7	36
33	Developmentally regulated synthesis of p8, a stress-associated transcription cofactor, in diapause-destined embryos of <i>Artemia franciscana</i> . Cell Stress and Chaperones, 2007, 12, 255.	2.9	36
34	Functional differentiation of small heat shock proteins in diapause-destined <i>Artemia</i> embryos. FEBS Journal, 2013, 280, 4761-4772.	4.7	34
35	Non-lethal heat shock induces Hsp70 synthesis and promotes tolerance against heat, ammonia and metals in post-larvae of the white leg shrimp <i>Penaeus vannamei</i> (Boone, 1931). Aquaculture, 2018, 483, 21-26.	3.5	33
36	Knockdown of heat shock protein 70 (Hsp70) by RNAi reduces the tolerance of <i>Artemia franciscana</i> nauplii to heat and bacterial infection. Journal of Experimental Marine Biology and Ecology, 2017, 487, 106-112.	1.5	32

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37	Non-Lethal Heat Shock of the Asian Green Mussel, <i>Perna viridis</i> , Promotes Hsp70 Synthesis, Induces Thermotolerance and Protects Against <i>Vibrio</i> Infection. <i>PLoS ONE</i> , 2015, 10, e0135603.	2.5	31
38	Diversity, structure, and expression of the gene for p26, a small heat shock protein from <i>Artemia</i> . <i>Genomics</i> , 2006, 88, 230-240.	2.9	30
39	Spatial distribution of posttranslationally modified tubulins in polarized cells of developing <i>Artemia</i> . <i>Cytoskeleton</i> , 1991, 18, 189-203.	4.4	29
40	Production and utilization of deetyrosinated tubulin in developing <i>Artemia</i> larvae: evidence for a tubulin-reactive carboxypeptidase. <i>Biochemistry and Cell Biology</i> , 1995, 73, 673-685.	2.0	29
41	Protein Synthesis in Brine Shrimp Embryos. <i>FEBS Journal</i> , 1981, 117, 543-551.	0.2	29
42	Artemin, a Diapause-Specific Chaperone, Contributes to the Stress Tolerance of <i>Artemia</i> Cysts and Influences Their Release from Females. <i>Journal of Experimental Biology</i> , 2014, 217, 1719-24.	1.7	28
43	The induction of Hsp70 synthesis by non-lethal heat shock confers thermotolerance and resistance to lethal ammonia stress in the common carp, <i>Cyprinus carpio</i> (Linn). <i>Aquaculture Research</i> , 2014, 45, 1706-1712.	1.8	26
44	Post-diapause synthesis of ArHsp40-2, a type 2 J-domain protein from <i>Artemia franciscana</i> , is developmentally regulated and induced by stress. <i>PLoS ONE</i> , 2018, 13, e0201477.	2.5	26
45	Structural and functional roles for beta-strand 7 in the alpha-crystallin domain of p26, a polydisperse small heat shock protein from <i>Artemia franciscana</i> . <i>FEBS Journal</i> , 2006, 273, 1020-1034.	4.7	25
46	Ingestion of bacteria overproducing DnaK attenuates <i>Vibrio</i> infection of <i>Artemia franciscana</i> larvae. <i>Cell Stress and Chaperones</i> , 2009, 14, 603-609.	2.9	25
47	The structural stability and chaperone activity of artemin, a ferritin homologue from diapause-destined <i>Artemia</i> embryos, depend on different cysteine residues. <i>Cell Stress and Chaperones</i> , 2011, 16, 133-141.	2.9	25
48	ArHsp40 and ArHsp40-2 contribute to stress tolerance and longevity in <i>Artemia franciscana</i> , but only ArHsp40 influences diapause entry. <i>Journal of Experimental Biology</i> , 2018, 221, .	1.7	25
49	Characterization of novel sequence motifs within N- and C-terminal extensions of p26, a small heat shock protein from <i>Artemia franciscana</i> . <i>FEBS Journal</i> , 2005, 272, 5230-5243.	4.7	24
50	Toxicity of organic mercury compounds to the developing brine shrimp, <i>Artemia</i> . <i>Ecotoxicology and Environmental Safety</i> , 1991, 21, 68-79.	6.0	21
51	Post-translationally modified tubulins in <i>Artemia</i> : Prelarval development in the absence of deetyrosinated tubulin. <i>Developmental Biology</i> , 1991, 148, 147-155.	2.0	20
52	Stress tolerance in diapausing embryos of <i>Artemia franciscana</i> is dependent on heat shock factor 1 (Hsf1). <i>PLoS ONE</i> , 2018, 13, e0200153.	2.5	19
53	Microtubule cold stability in supporting cells of the gerbil auditory sensory epithelium: correlation with tubulin post-translational modifications. <i>Cell and Tissue Research</i> , 2002, 307, 57-67.	2.9	17
54	Hsp70 knockdown reduced the tolerance of <i>Litopenaeus vannamei</i> post larvae to low pH and salinity. <i>Aquaculture</i> , 2019, 512, 734346.	3.5	13

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55	Synthesis of tubulin during early postgastrula development of <i>Artemia</i> : Isotubulin generation and translational regulation. <i>Developmental Biology</i> , 1991, 148, 138-146.	2.0	12
56	Expressed sequence tag (EST)-based characterization of gene regulation in <i>Artemia</i> larvae. <i>Invertebrate Reproduction and Development</i> , 2003, 44, 33-44.	0.8	11
57	Characterization of the microtubule proteome during post-diapause development of <i>Artemia franciscana</i> . <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2006, 1764, 920-928.	2.3	11
58	Production and characterization of monoclonal antibodies to the mammalian sperm cytoskeleton. <i>Molecular Reproduction and Development</i> , 1990, 25, 384-392.	2.0	10
59	Posttranslationally modified tubulins and microtubule organization in hemocytes of the brine shrimp, <i>Artemia franciscana</i> . , 2000, 244, 153-166.		10
60	Short-term cold stress and heat shock proteins in the crustacean <i>Artemia franciscana</i> . <i>Cell Stress and Chaperones</i> , 2020, 25, 1083-1097.	2.9	10
61	A Molecular Overview of Diapause in Embryos of the Crustacean, <i>Artemia franciscana</i> . <i>Topics in Current Genetics</i> , 2010, , 165-187.	0.7	10
62	ArHsp40, a type 1 J-domain protein, is developmentally regulated and stress inducible in post-diapause <i>Artemia franciscana</i> . <i>Cell Stress and Chaperones</i> , 2016, 21, 1077-1088.	2.9	9
63	Knockdown of the small heat-shock protein p26 by RNA interference modifies the diapause proteome of <i>Artemia franciscana</i> . <i>Biochemistry and Cell Biology</i> , 2019, 97, 471-479.	2.0	7
64	Identification of RNAi-related genes and transgenerational efficiency of RNAi in <i>Artemia franciscana</i> . <i>Aquaculture</i> , 2019, 501, 285-292.	3.5	7
65	RNA interference of Hsp70 in <i>Artemia franciscana</i> nauplii and its effect on morphology, growth, survival and immune response. <i>Aquaculture</i> , 2020, 520, 735012.	3.5	7
66	Characterization of $\beta$ -tubulin in <i>Artemia</i> : Isoform composition and spatial distribution in polarized cells of the larval epidermis. , 1998, 40, 331-341.		6
67	<i>Artemia</i> Morphology and Structure. , 2002, , 1-37.		6
68	Spatial organization and isotubulin composition of microtubules in epidermal tendon cells of <i>Artemia franciscana</i> . <i>Journal of Morphology</i> , 2005, 263, 203-215.	1.2	6
69	The synthesis of diapause-specific molecular chaperones in embryos of <i>Artemia franciscana</i> is determined by the quantity and location of heat shock factor 1 (Hsf1). <i>Cell Stress and Chaperones</i> , 2019, 24, 385-392.	2.9	6
70	Posttranslational modifications and assembly characteristics of goldfish tubulin. <i>Biology of the Cell</i> , 1993, 79, 63-70.	2.0	5
71	Organization of the cytoskeleton in brine shrimp setal cells is molt-dependent. <i>Canadian Journal of Zoology</i> , 1995, 73, 765-774.	1.0	5
72	Improving the long-term storage of a mammalian biosensor cell line via genetic engineering. <i>Biotechnology and Bioengineering</i> , 2010, 106, 474-481.	3.3	5

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73	Relative growth of the tendinal cell and muscle in larval <i>Artemia</i> . <i>Invertebrate Reproduction and Development</i> , 1995, 28, 205-210.	0.8	4
74	Truncation attenuates molecular chaperoning and apoptosis inhibition by p26, a small heat shock protein from <i>Artemia franciscana</i> . <i>Biochemistry and Cell Biology</i> , 2010, 88, 937-946.	2.0	4
75	Nonneural microtubule proteins: Structure and function. <i>BioEssays</i> , 1987, 6, 128-132.	2.5	3
76	Cloning and sequencing of tubulin cDNAs from <i>Artemia franciscana</i> : evidence for differential expression of $\beta^1$ - and $\beta^2$ -tubulin genes. <i>Biochemistry and Cell Biology</i> , 2009, 87, 989-997.	2.0	1
77	Small Heat Shock Proteins and Diapause in the Crustacean, <i>Artemia franciscana</i> . <i>Heat Shock Proteins</i> , 2015, , 563-578.	0.2	1
78	<i>Artemia</i> tubulin genes and mRNA. <i>Biochemical Society Transactions</i> , 1987, 15, 1173-1174.	3.4	0
79	Preparation and Characterization of Posttranslationally Modified Tubulins From <i>Artemia franciscana</i> . <i>Methods in Molecular Medicine</i> , 2007, , 45-63.	0.8	0